

Table S1. Correlations between abdominal ultrasound measurements and physical function and strength in participants who underwent additional testing (n=24).

				Grip strength, kg				Isokinetic 60%/s		Isokinetic 180%	
	SPPB score	Gait speed, m/s	6MWT, m	Left	Right	Isometric torque, Nm	Torque, Nm	Power, W	Torque, Nm	Power, W	
<i>Tissue thickness</i>											
Muscle, cm	-0.039, 0.864	-0.071, 0.748	0.100, 0.651	0.333, 0.120	0.270, 0.213	0.450, 0.036	0.601, 0.003	0.452, 0.035	0.550, 0.008	0.434, 0.044	
SAT, cm	-0.028, 0.901	0.119, 0.588	-0.033, 0.882	-0.053, 0.812	-0.171, 0.436	-0.342, 0.119	-0.338, 0.124	-0.169, 0.453	-0.340, 0.122	-0.281, 0.204	
<i>First-order texture features</i>											
Mean echointensity, A.U.	0.316, 0.151	0.253, 0.243	-0.151, 0.491	-0.207, 0.343	-0.146, 0.507	-0.424, 0.049	-0.419, 0.052	-0.294, 0.185	-0.338, 0.124	-0.222, 0.321	
Histogram skew, A.U.	0.051, 0.823	0.072, 0.745	0.033, 0.881	0.317, 0.140	0.228, 0.295	0.710, <0.001	0.748, <0.001	0.601, 0.003	0.692, <0.001	0.545, 0.009	
Histogram kurtosis, A.U.	0.068, 0.763	0.030, 0.893	0.089, 0.687	0.145, 0.509	0.177, 0.419	0.579, 0.005	0.676, <0.001	0.564, 0.006	0.622, 0.002	0.471, 0.027	
<i>Second-order texture features</i>											
Energy, A.U.	-0.627, 0.002	-0.374, 0.079	-0.025, 0.909	-0.134, 0.541	-0.104, 0.635	-0.018, 0.936	0.095, 0.675	-0.090, 0.691	0.029, 0.900	-0.133, 0.557	
Entropy, A.U.	0.593, 0.004	0.380, 0.074	0.001, 0.997	0.163, 0.459	0.118, 0.591	0.079, 0.728	-0.001, 0.997	0.139, 0.538	0.052, 0.817	0.186, 0.408	
GLCM energy, A.U.	-0.669, <0.001	-0.307, 0.155	0.034, 0.878	-0.211, 0.334	-0.151, 0.493	-0.142, 0.529	-0.036, 0.875	-0.157, 0.486	-0.116, 0.608	-0.297, 0.179	
GLCM contrast, A.U.	0.231, 0.301	0.212, 0.331	-0.107, 0.626	0.212, 0.331	0.124, 0.573	0.267, 0.230	0.287, 0.196	0.253, 0.256	0.251, 0.259	0.270, 0.225	
GLCM correlation, A.U.	0.265, 0.233	0.267, 0.218	0.427, 0.042	0.091, 0.680	0.086, 0.695	-0.257, 0.248	-0.332, 0.131	-0.189, 0.399	-0.258, 0.245	-0.174, 0.439	
GLCM homogeneity, A.U.	-0.394, 0.069	-0.217, 0.321	0.215, 0.324	-0.070, 0.751	-0.058, 0.794	-0.053, 0.814	0.001, 0.998	-0.095, 0.675	-0.035, 0.876	-0.120, 0.594	
<i>Higher-order texture features</i>											
LBP energy, A.U.	-0.219, 0.328	-0.254, 0.243	-0.275, 0.204	-0.514, 0.012	-0.264, 0.224	-0.259, 0.244	-0.239, 0.285	-0.213, 0.342	-0.257, 0.248	-0.300, 0.175	
LBP entropy, A.U.	0.324, 0.141	-0.064, 0.773	-0.105, 0.632	0.164, 0.454	0.136, 0.536	0.053, 0.814	0.079, 0.728	0.107, 0.636	0.118, 0.601	0.263, 0.237	
Mean blob size, cm ²	0.336, 0.126	0.173, 0.430	-0.058, 0.791	-0.080, 0.717	-0.064, 0.772	-0.156, 0.487	-0.070, 0.757	-0.010, 0.964	0.011, 0.961	0.106, 0.638	

Data are (r, p). Significant correlations are bolded.

Abbreviations: 6MWT, 6-Minute Walk Test; GLCM, grey-level co-occurrence matrix; LBP, local binary pattern; SAT, subcutaneous adipose tissue; SPPB, Short Physical Performance Battery.

Table S2. Correlations between abdominal ultrasound measurements and metabolic markers in participants who underwent additional testing (n=24).

	Glucose, mM	Insulin, μ IU/mL	C-peptide, ng/mL	HOMA-IR
<i>Tissue thickness</i>				
Muscle, cm	0.299, 0.165	0.189, 0.387	0.266, 0.299	0.283, 0.191
SAT, cm	0.172, 0.434	0.242, 0.266	0.191, 0.381	0.273, 0.207
<i>First-order texture features</i>				
Mean echointensity	-0.138, 0.531	-0.268, 0.217	-0.166, 0.450	-0.292, 0.176
Histogram skew	0.311, 0.149	0.006, 0.979	0.134, 0.542	0.119, 0.589
Histogram kurtosis	0.193, 0.377	0.055, 0.805	0.132, 0.549	0.133, 0.544
Energy	0.125, 0.570	0.486, 0.019	0.338, 0.115	0.441, 0.035
Entropy	-0.120, 0.586	-0.463, 0.026	-0.294, 0.172	-0.422, 0.045
<i>Second-order texture features</i>				
GLCM energy	0.098, 0.656	0.464, 0.026	0.261, 0.230	0.406, 0.055
GLCM contrast	-0.106, 0.632	-0.250, 0.249	-0.084, 0.703	-0.241, 0.269
GLCM correlation	0.152, 0.488	-0.083, 0.706	-0.110, 0.617	-0.046, 0.833
GLCM homogeneity	0.162, 0.460	0.338, 0.114	0.239, 0.272	0.317, 0.140
<i>Higher-order texture features</i>				
LBP energy	-0.191, 0.382	-0.186, 0.395	-0.142, 0.517	-0.239, 0.273
LBP entropy	-0.075, 0.735	-0.004, 0.987	0.021, 0.925	-0.007, 0.973
Mean blob size, cm^2	-0.177, 0.419	-0.251, 0.248	-0.097, 0.658	-0.265, 0.222

Data are (r, p). Significant correlations are bolded.

Abbreviations: GLCM, grey-level co-occurrence matrix; HOMA-IR, homeostatic model assessment of insulin resistance; LBP, local binary pattern; SAT, subcutaneous adipose tissue.

Table S3. Correlations between anterior thigh ultrasound measurements and physical function and strength in participants who underwent additional testing (n=24).

				Grip strength, kg				Isokinetic 60%/s		Isokinetic 180%	
	SPPB score	Gait speed, m/s	6MWT, m	Left	Right	Isometric torque, Nm	Torque, Nm	Power, W	Torque, Nm	Power, W	
<i>Tissue thickness</i>											
Muscle, cm	-0.056, 0.801	0.007, 0.974	0.064, 0.766	0.347, 0.097	0.292, 0.166	0.457, 0.028	0.589, 0.003	0.459, 0.028	0.617, 0.002	0.500, 0.015	
SAT, cm	-0.226, 0.300	0.063, 0.769	0.082, 0.705	-0.387, 0.062	-0.379, 0.068	-0.268, 0.216	-0.176, 0.422	-0.113, 0.608	-0.188, 0.390	-0.330, 0.124	
<i>First-order texture features</i>											
Mean echointensity, A.U.	0.050, 0.819	0.084, 0.696	-0.145, 0.499	-0.099, 0.644	-0.153, 0.477	-0.302, 0.162	-0.385, 0.069	-0.416, 0.048	-0.341, 0.111	-0.301, 0.163	
Histogram skew, A.U.	0.111, 0.615	-0.074, 0.729	0.088, 0.682	0.166, 0.440	0.210, 0.325	0.337, 0.115	0.310, 0.150	0.307, 0.154	0.295, 0.171	0.316, 0.141	
Histogram kurtosis, A.U.	0.163, 0.458	-0.126, 0.557	0.018, 0.935	0.107, 0.617	0.149, 0.488	0.280, 0.195	0.250, 0.250	0.291, 0.178	0.226, 0.299	0.301, 0.163	
Energy, A.U.	-0.235, 0.281	-0.136, 0.528	0.090, 0.674	-0.040, 0.853	0.025, 0.908	0.173, 0.430	0.289, 0.181	0.198, 0.366	0.294, 0.173	0.206, 0.346	
Entropy, A.U.	0.256, 0.238	0.152, 0.478	-0.068, 0.752	0.037, 0.865	-0.016, 0.941	-0.156, 0.478	-0.267, 0.218	-0.204, 0.351	-0.263, 0.225	-0.182, 0.407	
<i>Second-order texture features</i>											
GLCM energy, A.U.	-0.300, 0.164	-0.147, 0.492	0.067, 0.757	-0.084, 0.698	-0.013, 0.952	0.149, 0.497	0.299, 0.165	0.195, 0.372	0.292, 0.176	0.154, 0.484	
GLCM contrast, A.U.	0.284, 0.188	0.124, 0.563	-0.088, 0.684	0.106, 0.623	-0.005, 0.981	-0.061, 0.783	-0.161, 0.464	-0.130, 0.555	-0.166, 0.449	-0.104, 0.638	
GLCM correlation, A.U.	-0.088, 0.689	0.049, 0.821	0.180, 0.401	0.067, 0.756	0.213, 0.317	0.112, 0.610	0.210, 0.336	0.160, 0.465	0.239, 0.273	0.191, 0.383	
GLCM homogeneity, A.U.	-0.173, 0.429	-0.117, 0.587	0.126, 0.559	0.049, 0.812	0.135, 0.529	0.265, 0.222	0.402, 0.057	0.330, 0.124	0.398, 0.060	0.298, 0.167	
<i>Higher-order texture features</i>											
LBP energy, A.U.	0.399, 0.059	-0.063, 0.770	-0.152, 0.478	-0.122, 0.569	-0.131, 0.541	-0.021, 0.925	-0.070, 0.750	0.010, 0.966	-0.097, 0.661	0.054, 0.806	
LBP entropy, A.U.	0.034, 0.876	-0.004, 0.984	0.233, 0.274	0.283, 0.180	0.420, 0.041	0.320, 0.137	0.290, 0.180	0.265, 0.222	0.330, 0.124	0.347, 0.104	
Mean blob size, cm ²	0.200, 0.361	0.105, 0.624	-0.236, 0.266	-0.085, 0.693	-0.208, 0.329	-0.181, 0.409	-0.170, 0.437	-0.207, 0.343	-0.106, 0.631	-0.083, 0.707	

Data are (r, p). Significant correlations are bolded.

Abbreviations: 6MWT, 6-Minute Walk Test; GLCM, grey-level co-occurrence matrix; LBP, local binary pattern; SAT, subcutaneous adipose tissue; SPPB, Short Physical Performance Battery.

Table S4. Correlations between anterior thigh ultrasound measurements and metabolic markers in participants who underwent additional testing (n=24).

	Glucose, mM	Insulin, µIU/mL	C-peptide, ng/mL	HOMA-IR
<i>Tissue thickness</i>				
Muscle, cm	0.339, 0.105	0.545, 0.006	0.530, 0.008	0.620, 0.001
SAT, cm	-0.178, 0.405	-0.038, 0.861	-0.079, 0.713	-0.102, 0.637
<i>First-order texture features</i>				
Mean echointensity	-0.239, 0.261	-0.325, 0.122	-0.351, 0.092	-0.400, 0.054
Histogram skew	0.110, 0.608	-0.141, 0.512	-0.001, 0.995	-0.056, 0.794
Histogram kurtosis	0.068, 0.752	-0.070, 0.745	0.088, 0.684	-0.003, 0.986
Energy	0.248, 0.243	0.243, 0.253	0.359, 0.085	0.300, 0.155
Entropy	-0.265, 0.211	-0.312, 0.137	-0.390, 0.060	-0.366, 0.078
<i>Second-order texture features</i>				
GLCM energy	0.249, 0.241	0.329, 0.117	0.385, 0.063	0.381, 0.067
GLCM contrast	-0.105, 0.626	-0.489, 0.015	-0.455, 0.026	-0.484, 0.017
GLCM correlation	-0.129, 0.549	0.565, 0.004	0.433, 0.035	0.507, 0.012
GLCM homogeneity	0.206, 0.334	0.465, 0.022	0.478, 0.019	0.516, 0.010
<i>Higher-order texture features</i>				
LBP energy	0.066, 0.760	-0.381, 0.066	-0.138, 0.521	-0.342, 0.102
LBP entropy	0.123, 0.568	0.376, 0.071	0.308, 0.144	0.419, 0.042
Mean blob size, cm ²	-0.053, 0.805	-0.182, 0.395	-0.103, 0.633	-0.196, 0.360

Data are (r, p). Significant correlations are bolded.

Abbreviations: GLCM, grey-level co-occurrence matrix; HOMA-IR, homeostatic model assessment of insulin resistance; LBP, local binary pattern; SAT, subcutaneous adipose tissue.